French River Log

Volume 3, Number 1 **March 1, 2008**

Welcome to the March 2008 edition of the French River Log, the newsletter of the French River Connection. This is the first edition developed as an electronic newsletter from the ground up. It is best viewed on a wide mail screen. We are doing this on a trial basis. Comments are most welcome!

You are receiving this newsletter because you at some point gave us your e-mail address which we have used to send you other newsletters, meeting announcements, meeting minutes, and other communications. There is a link at the bottom of this newsletter from which you may unsubscribe if you wish.

Congratulations, Dudley Conservation Land Trust

We Did It!

The Dudley Conservation Land Trust is pleased to announce that as of February 15, 2008, we have become the proud protectors of 81.28 acres in the Tufts Branch Valley located in the western part of Dudley. This was a major acquisition for several reasons:
1) the parcel connects the Keekamoochaug Wildlife Sanctuary to other large areas of protected lands;
2) the parcel is an integral part of the green wildlife corridor which protects habitats for bobcats, otters, deer, coyote, and many species of birds and butterflies;
3) the parcel contains part of a certified cold water fishery known as the Tufts Branch, as well as a section of the Old Stagecoach Road;
4) the parcel offers gentle terrain, scenic vistas south to Connecticut and east to Old Dudley Hill; and
5) the parcel is available for everyone to enjoy passive recreation and nature study with trails already in place. The DCLT feels privileged to be the stewards of this vital area. Thanks to all the French River Connection members who supported this project. I hope that you will take the time to walk the trails, enjoy this landscape, and reconnect with nature.

Sandy Peterson, President, Dudley Conservation Land Trust

Water Quality Monitoring Volunteers Needed

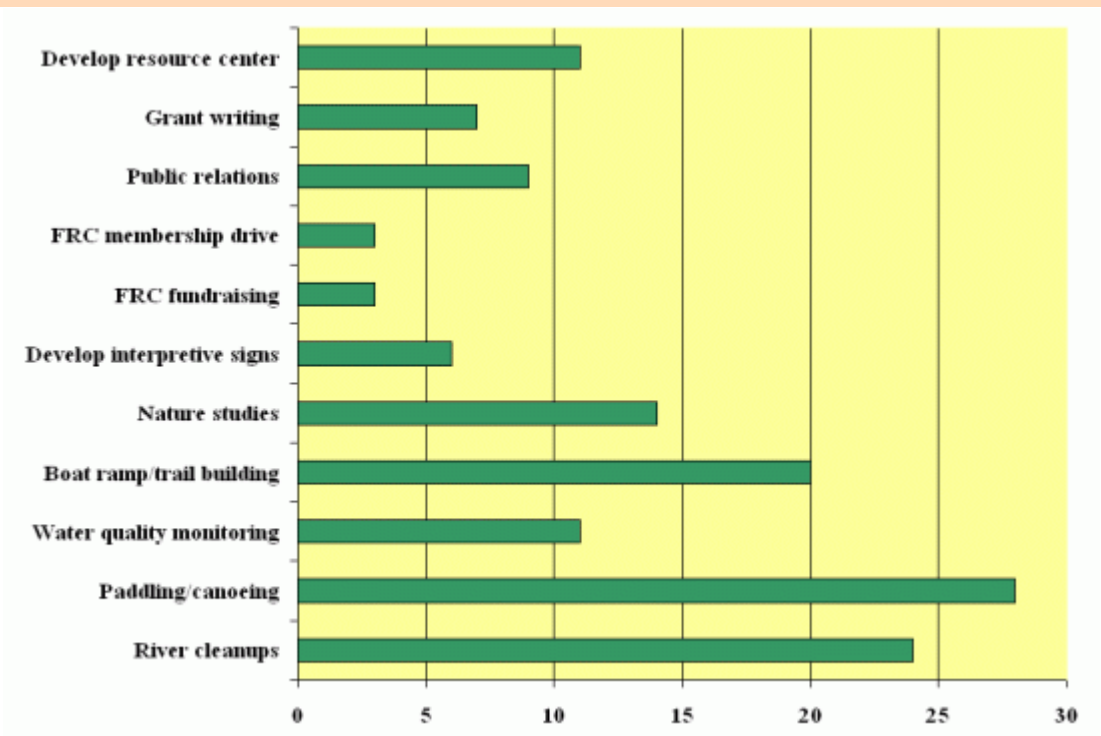
We need volunteers for our 2008 Water Quality Monitoring Campaign. We go out on a Saturday morning once a month from March through November. We start at 8 am with a quick orientation, and are done by noon. This is a chance to visit some streams you may have never seen before, and learn about the water quality of the French River and its tributaries. This can be a good activity for a family group. Monitors do not go in the water. We need volunteers for the dates at right. You can volunteer for a specific date or be on call. To volunteer, call (508) 943-2698 or email Ken

WQM Schedule

April 19
May 24
July 21
August 23
September 20
October 25
November 22

What do you like to do?

Here's what you said on the January survey



Goals for 2008

set in January by the Board of Directors

Raise $2000.00 in fundraising activities to support annual FRC operating expenses.

One major river clean up. Behind downtown is an area of need.

Organize paddles.

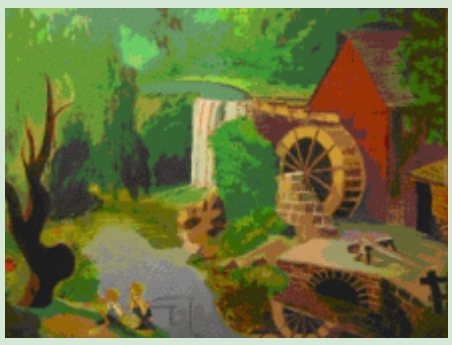
Complete Shoreline Survey.

Increase the number of paid members by 20%.

Maintain transparency in running the organization.

Continue to develop paddling access point and boat launches.

Fence select specimen trees threatened by beavers.



Moving Toward Freely Flowing Rivers

This bucolic painting, painted by my great grandfather, hung above my bed for the majority of my childhood. The scene of a boy and girl fishing at the base of a grist mill dam sheltered under the boughs of a weeping willow brought me a sense of calm and tranquility. Over two decades later, my interpretation of this painting has changed dramatically: I now see the dam as a severe ecological impairment, while the image as a whole helps me understand why a public meeting focused on dam removal sometimes arouses fervor and anger—for almost 400 years this image has been an integral part of New England scenery and the primary driver in our industrial development.

As a staff member of the Massachusetts Department of Fish and Game Riverways Program, my mission is to promote the protection, restoration and ecological integrity of Massachusetts' 11,000 rivers and streams. Part of this mission is achieved through dam removal.

Dams affect nearly every aspect of river health and have been likened to a clot in one's artery. Rivers are defined by flowing water, while dams create an artificial, unsustainable impoundment of still water which affects water chemistry, connectivity and habitat. Riverine fish such as brook trout prefer water temperature to be in the 60s or lower. As water flow slackens upstream of the dam, sun rays penetrate and increase the water temperature. Warm water holds less dissolved oxygen than cold water, so aquatic life that depends on cool, flowing, well-oxygenated water becomes stressed and may search for alternative habitat.

But what happens when aquatic life can't find alternative habitat? This is referred to as connectivity. Dams fragment rivers, preventing movement up and down the stream system for reproduction, foraging and escape from predation.

Besides flowing water, rivers also transport sediment. Dams prevent sediment from continuing downstream to replenish our estuaries. Instead, sediment accumulates behind dams, changing the river bottom (or "substrate") from cobble or pebble to one of muck and silt. For many aquatic species, cobbles and pebbles are the nursery for their eggs—a habitat of silt means loss in egg viability.

The science is clear that dams harm and degrade river ecosystems (visit www.dameffects.org for a visual explanation). The economics are clear that dam removal is cheaper than dam repair (dam removal is a one-time cost, while repair is indefinite). Liability issues cease with the removal of the ageing infrastructure.

With the science, the economics and the legal implications favoring dam removal, one might assume that dam removal would be an "easy sell", so to speak. The reality is that many people have concerns. For example, I'm often asked about what a dam removal would be like: "Will it smell?", "Will it be a mudflat?", "Will there be no water?". The answer (see photos below): It will be a river.

Riverways Dam Removal Project: Silk Mill Dam, Yokum Brook, Beckett, Massachusetts

I'm also asked, "Why not retrofit the dam for hydropower?" While this may be appropriate for a few dams, it is not cost-effective for the majority of Massachusetts' dams. Additionally, while hydropower may be an alternative energy source, it is an alternative that takes a great toll on a valuable ecological resource and habitat (as opposed to photovoltaics).

I appreciate that people care about their environment enough to have concerns about a dam removal. It is not an insignificant change to our landscape. Most dams have a 50-year design life. Many of Massachusetts' dams have past this birthday. As a result, more and more communities that have grown fond of the scenery exhibited in my great-grandfathers' painting are going to have difficult conversations about the value of their dams. My hope is that these conversations will involve thoughtful assessments of the value of ecological health, economic sustainability (dams need to be maintained, while freely flowing rivers do not), the wise use of our limited financial resources, and our concepts of aesthetic beauty and recreational benefit.

Gabrielle Stebbins, Riverways Program
Massachusetts Department of Fish and Game

Editor's Note: No dams in the French River watershed are currently under consideration for removal, but the controversy is sometimes seen in the Worcester Telegram and Gazette. Many people have enjoyed the quiet coves teeming with wildlife, the flatwater paddling, and bass fishing all their lives. Other concerns, as the author points out, center around what a flowing river corridor will look like. Will it be remediated enough to be able to return to return a broad river corridor to a natural state, or will the corridor simply disappear under concrete? ----KP

Where Did All the Water in the French River Come From?

Recently, a comet called Holmes showed a dramatic increase in brightness. No other comet has ever gotten so bright so fast. It was easily visible in the eastern sky in the evening. Because of its tremendous distance, about 100 million miles, it was fairly small and did not produce a tail, appearing rounded in shape. Observing the comet one evening, I began to reflect upon an interesting connection between ourselves and comets…. namely, the origins of all this water on earth.

The French River and all of the other waters cover about 75% of the earth's surface. The earth was formed hot and dry about 4.5 billion years ago and the origins of all that water has been a bit of a mystery. One suggestion was that comets brought the water here early in the earth's history. Comets are often called dirty snowballs because they are composed of dust, minerals, carbon and a lot of ice that formed beyond the solar system. Halley's comet is a 5 mile long chunk of dirty snowball. However, the comet origin hypothesis was undone back in the 1990's when it was shown that the isotope form of water in comets is much different than earth's water.

New research may have revived the comet origin hypothesis. Astronomers have discovered a new type of comet that was formed and still exists in the asteroid belt between Mars and Jupiter. These comet/asteroids are thought to have a water content similar to our waters. A spacecraft called Dawn launched last fall is headed to the asteroid belt and may help provide some answers to the origins of our waters. The spacecraft is carrying the name of the French River Connection on a small chip on board.

Not only do we of the French River Connection paddle on waters of possible cometary origin, but our name will forever be out there sailing among the comets from which our French River originated. Quite the connection!

Tom Ryzewski, a French River Connection Board member, is a frequent contributor

Meeting Schedule

Board	Mar 12
Annual meeting	Apr 9
Board	May 14
General meeting	Jun 11
Board	Aug 13
General meeting	Sep10
Board	Nov 12

Watch for these events

Town Spring Cleanups
Paddling events
Trail-making at Perryville
Tree protection
Summertime low-water cleanup
Boat ramp construction
French River Day

French River Day